

**REMARKS**

The Office Action dated October 1, 2004 has been received and carefully studied.

The Examiner rejects claims 1-2 under 35 U.S.C. §102(a) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over any one of Burge et al., or one of four references to Ayambem et al. The Examiner states that each of the cited references discloses dry compositions containing a hydraulic binder, a substrate adherence and coherence agent such as PVA, and set retarder. The Examiner believes that the adherence and coherence property is inherent in the prior art.

The rejections are respectfully traversed.

As an initial matter, Burge et al. is effective as a reference as of its PCT filing date of February 15, 2002, which is after the effective filing date of this divisional application (January 11, 2002). Accordingly, Burge et al. is not a reference to this case. Applicants respectfully submit that this rejection is therefore improper, and request its withdrawal.

The two Ayambem et al. publications are the respective publications of the two Ayambem et al. patents cited by the Examiner, and therefore are merely cumulative. Moreover, the two Ayambem et al. patents are related as continuations, so

they are also cumulative of each other. Accordingly, the following discussion focuses on Ayambem et al., U.S. Patent No. 6,436,185, but applies to each of the cited Ayambem references.

Ayambem et al. disclose a joint compound for use in filling and coating joints between adjacent gypsum wallboard sheets. More specifically, the objective of the invention of Ayambem et al. is developing a hybrid drying-type/setting-type joint compound. To that end, the joint compound necessarily includes water, calcium carbonate, optionally calcium sulfate hemihydrate, and a water-soluble set retarder. Indeed, the amount of water used is from about 20 wt.% to about 37 wt.% based on total weight of the compound.

PVA is disclosed as a binder to improve bonding to the substrate such as wallboard. However, Ayambem et al. do not disclose or suggest a dry mixture; the joint compound of Ayambem et al. necessarily contains water. Moreover, there is no indication that the joint compound is pumpable or capable of spray application upon the addition of water. Indeed, typical application methods disclosed for joint compounds are with a knife, blade or trowel.

To further distinguish the Ayambem et al. references, claim 1 has been amended to recite that the substrate adherence and coherence agent is present in the dry mixture

in an amount effective for enhancing adherence and coherence to said steel substrate. Ayambem et al. do not disclose or suggest using a coherence and adherence agent, or using a coherence and adherence agent in an amount effective for enhancing coherence and adherence to a steel substrate as now claimed.

It is noted that suitable amounts of polyvinyl alcohol are disclosed in the instant specification in the paragraph bridging pages 7-8 and in the first full paragraph on page 12, and these amounts are from about 1-12% based on the mass of water added to form the pumpable slurry. In contrast, the polyvinyl alcohol binder of Ayambem et al. is used in an amount of about 0.1 wt% to about 0.4 wt % based on the total weight of joint compound. This is substantially less than an amount effective for enhancing adherence and coherence to a steel substrate as required by the instant claims as amended.

The Examiner also rejects claims 1-2 under 35 U.S.C. §101 as claiming the same invention as that of claims 11 and 12 of prior U.S. Publication No. 2002/0132882, and under the judicially created doctrine of obviousness-type double patenting over claims 11 and 12 of 2002/0132882.

The rejection is respectfully traversed.

It is noted that the '882 application is pending and has not yet issued as a patent. In addition, claim 11 therein depends from claim 10, and is directed to a method of forming a stabilized foam, including the step of introducing air into a slurry in a length of hose to create turbulence and mechanically form a foam. It is not directed to a dry mixture as claimed in the instant application. Claim 12 of the '882 application has been cancelled.

The Examiner rejects claims 1-2 under 35 U.S.C. §101 as claiming the same invention as that of claims 16 and 17 of 2003/0125405, and under the judicially created doctrine of obviousness-type double patenting over claims 16 and 17 of 2002/0125405. This application is pending and claims 16 and 17 have been cancelled.

The Examiner rejects claims 1-2 under 35 U.S.C. §101 as claiming the same invention as that of claims 23-30 of 2003/012404, and under the judicially created doctrine of obviousness-type double patenting over claims 23-30 of 2003/012404. This publication issued as U.S. Patent No. 6,699,915 and claims 23-30 were cancelled prior to issuance. Accordingly, it is believed that this rejection is moot.


The Examiner rejects claims 1-2 under 35 U.S.C. §101 as claiming the same invention as that of claims 18-23 of 2002/0137807, and under the judicially created doctrine of

obviousness-type double patenting over claims 18-23 of 2002/0137807. This publication issued as U.S. Patent No. 6,780,230 in which original claims 18-23 were cancelled prior to issuance. Accordingly, it is believed that this rejection is moot.

New claims 3-14 have been added to further define the invention.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,

  
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